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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/663,609  | 09/15/2003  | Hideya Kawahara      | SUN04-0195          | 3549             |
| 57960 7590 04/01/2008<br>PVF -- SUN MICROSYSTEMS INC.<br>C/O PARK, VAUGHAN & FLEMING LLP<br>2820 FIFTH STREET<br>DAVIS, CA 95618-7759 |             |                      |                     |                  |
| EXAMINER  |             |                      |                     |                  |
| PHANTANA ANGKOOK, DAVID   |             |                      |                     |                  |
| ART UNIT  |             | PAPER NUMBER         |                     |                  |
| 2175  |             |                      |                     |                  |
| MAIL DATE   |             | DELIVERY MODE        |                     |                  |
| 04/01/2008  |             | PAPER                |                     |                  |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/663,609

**Applicant(s)**

KAWAHARA, HIDEYA

**Examiner**

David Phantana-angkool

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9, 11-21, 23-33 and 35-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11-21, 23-33, and 35-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

1. This action is responsive to the following communications: RCE filed on February 26<sup>th</sup>, 2007.
2. Applicant amended claims 1, 13, 25, and 37.
3. Claims 1-9, 11-21, 23-33, and 35-37 are pending claims.

### ***Claim Rejections - 35 USC § 103***

4. **The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:**

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 1, 6 –9, 11, 12, 13, 18-21, 23, 24, 25, 30 – 33, and 35- 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gordon, US# 7,043,701 B2 in view of Miller, US# 6,597,358 B2 and in further view of Jetha et al, US# 6,661,426 B1 (hereinafter Jetha).**

**As for independent claim 1:**

Gordon shows method for manipulating a window within a three-dimensional (3D) display model, comprising:

- *receiving an input from a 2D pointing device, wherein the input specifies a 2D offset within a 2D display, wherein the 2D display provides a view into the 3D display model (3: 3:40-42 and 4: 4-7);*
- *using the 2D offset to move a cursor to a position in the 2D display (3: 43-46);*
- *determining if the cursor overlaps a window within the 3D display model; if the cursor overlaps a window, determining a 2D position of the cursor with respect to a 2D coordinate system for the window, and communicating the 2D position to an application associated with the window to enable a user of the 2D pointing device to interact with the application (4: 19-31 and 4:42-59).*

Gordon does not specifically *displaying the window as a 3D object; wherein when the window is rotated, a spine located on a side edge of the window becomes visible, wherein the spine contains a title for the same window, wherein the thickness of the spine is significantly less than the dimension of the window.*

In the same field of invention Miller teaches displaying the window as a three dimension object as shown in Fig. 7, Column 7, lines 4-12. Jetha teaches displaying the window as a three dimension object such as shown in Figs. 2, 4, and 5; Column 5, lines 30-36. The three dimension object contains a title for the same window as shown in the spine on Figs. 2# β, Column 4: 36-63). Accordingly it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the method of manipulation a window in a three-dimensional environment as shown by Gordon to include displaying the window as a three dimension object as taught by Miller and displaying a title for the same window as taught by Jetha, thus allowing the user to work more efficient by grouping applications to a 3D object (Miller 7: 23-45) and providing convenience to the user by improving the volume of display capacity per unit area of display surface (Jetha, 1: 46-49).

**As for dependent claim 6:**

Gordon-Miller-Jetha suggests the *method of claim 1, wherein if the cursor overlaps a given window, the given window becomes a selected window and appears opaque while other windows within the 3D display model appear translucent* (Gordon, 5:30-42). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the method of Gordon for the same reason as stated previously above (see claim 1 *supra*).

**As for dependent claim 7:**

Gordon-Miller-Jetha suggests method for manipulating a window within a three-dimensional (3D) display model. Gordon further shows a method for changing views and by altering opacity level of the objects and/or scaling the dimensions of the objects (5: 5-9). Gordon does not specifically show *the method of claim 1, wherein if a command is received to minimize a window, the window minimization operation is illustrated as an animation that moves the window toward a minimized position near a border of the 2D display while reducing the size of the window to its minimized size.* In the same field of invention Miller

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teaches minimizing window in 3: 38-45. However this limitation would have been obvious to one of ordinary skill in the art since Gordon shows a method displaying two-dimensional workspace and also shows the user manipulating various applications in workspace (Gordon, 1: 23-40). One would have been motivated to modify the method of displaying computer workspace as shown by Gordon to incorporate the minimizing and rotating functionality as taught by Miller, thus reducing the "shuffling" of windows (Miller, 1: 63-2: 9).

**As for dependent claim 8:**

Gordon-Miller-Jetha suggests *the method of claim 1, wherein if a command is received to close a window, the window closing operation is illustrated as an animation that throws the window away by moving the window toward the background of the 3D display model and causing the window to fade away* in Miller Col. 6, lines 38-53. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the method of Gordon for the same reason as stated previously above (see claim 7 *supra*).

**As for dependent claim 9:**

Gordon-Miller-Jetha suggests *the method of claim 1, wherein if a command is received to rotate all windows in the 3D display model, the method further comprises rotating all windows in the 3D display model, so that windows are viewed from an oblique angle through the 2D display, whereby the contents of the windows remain visible, while the windows occupy less space in the 2D display and are less likely to overlap each other* in Miller Col. 6, line 53 to Col. 7, line 3. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the method of Gordon for the same reason as stated previously above (see claim 1 *supra*).

**As for dependent claim 11:**

Gordon-Miller-Jetha suggests *the method of claim 9, wherein when a user selects one of the rotated windows, the method further comprises: moving the selected window in front of the other windows; unrotating the selected window so it faces the user; and moving the other windows back to their original positions and orientations* in Col. 7, lines 4-45. It would have been obvious to one of ordinary skill in the

art at the time of the invention was made to modify the method of Gordon for the same reason as stated previously above (see claim 1 *supra*).

**As for dependent claim 12:**

Gordon-Miller-Jetha suggests *the method of claim 1, wherein the 2D pointing device can include: a mouse; a track ball; a joystick; and a glide point* (Gordon, 3: 48-58). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the method of Gordon for the same reason as stated previously above (see claim 1 *supra*).

**As for independent claims 13, 25 and 37:**

Claims 13, 25 and 37 reflect the computer-readable storage medium and apparatus comprising of computer readable instructions for performing the step of method claim 1 and are respectfully rejected along the same rationale.

**As for dependent claims 18 and 30:**

Claims 18 and 30 reflect the computer-readable storage medium and apparatus comprising of computer readable instructions for performing the step of method claim 6 and are respectfully rejected along the same rationale.

**As for dependent claims 19 – 21, 23, and 31 – 33, 35:**

Claims 19 – 21, 23, and 31 – 35 reflect the computer-readable storage medium and apparatus comprising of computer readable instructions for performing the step of method claims 7 – 9, and 11 and are respectfully rejected along the same rationale.

**As for dependent claims 24 and 36:**

Claims 24 and 36 reflect the computer-readable storage medium and apparatus comprising of computer readable instructions for performing the step of method claim 12 and are respectfully rejected along the same rationale.

6. **Claims 2 – 4, 14 – 16, and 26 – 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gordon, US# 7,043,701 B2 in view of Miller, US# 6,597,358 B2 in view of Jetha et al, US# 6,661,426 B1 (hereinafter Jetha), and in further view of DeStefano, US# 6,874,123 B1.**

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**As for dependent claim 2:**

Gordon shows method for manipulating a window within a three-dimensional (3D) display model. Gordon further shows that the user have the ability to navigate to between layers of windows in the z-axis using the pointing device (5: 10-30). Gordon does not specifically show *wherein projecting a ray from a predefined viewpoint in the 3D display model through the cursor, which is located in a rectangle representing the 2D display in the 3D display model, toward one or more windows in the 3D display model; and determining if the ray intersects a window.* However in the same field of invention DeStefano teaches projecting a ray from a viewpoint through the cursor in 13: 10-33 and Fig. 17). Both Gordon and DeStefano show three-dimensional workspace. Accordingly it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the three-dimensional workspace shown by Gordon, Miller, and Jetha to incorporate the ray projection from a cursor as taught by DeStefano, thus allowing the user to navigate between layers of information displayed on the screen (DeStefano, 13:34-44).

**As for dependent claim 3:**

Gordon-Miller- Jetha-DeStefano suggests the *method of claim 2, wherein determining the 2D position of the cursor with respect to the 2D coordinate system of the window involves: determining a 3D position where the ray intersects the window within the 3D display model; and transforming the 3D position in the 3D display model into a 2D position with respect to the 2D coordinate system for the window based upon the size, position and orientation of the window within the 3D display model* (Gordon, 4:19-41 and DeStefano, Fig. 18, 12:54-65).

**As for dependent claim 4:**

Gordon-Miller- Jetha-DeStefano suggests the *method of claim 3, wherein the size, position and orientation of the window within the 3D display model are specified by a number of attributes of the window, including: a height; a width; an x-position; a y-position; a z-position; a first rotation around a vertical axis of the window; and a second rotation around a horizontal axis of the window* in DeStefano Col. 12, line 54 to Col. 13, line 10. It would have been obvious to one of ordinary skill in the art at the

time of the invention was made to modify the method of Gordon for the same reason as stated previously above (see claim 7 *supra*).

**As for dependent claims 14 – 16, 26 – 28:**

Claims 14 – 16, 26 – 28 reflect the computer-readable storage medium and apparatus comprising of computer readable instructions for performing the step of method claims 2 – 4 and are respectfully rejected along the same rationale.

7. **Claims 5, 17 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gordon, US# 7,043,701 B2 in view of Miller, US# 6,597,358 B2 in view of Jetha et al, US# 6,661,426 B1 (hereinafter Jetha), and in further view of Cook et al., US# 6,822,662 B1 (hereinafter Cook).**

**As for dependent claim 5:**

Gordon shows method for manipulating a window within a three-dimensional (3D) display model. Gordon further shows a method for changing views and by altering opacity level of the objects and/or scaling the dimensions of the objects (5: 5-9). Gordon does not specifically show *changing a viewing angle for the 3D display model by rotating objects within the 3D display model around a predefined viewpoint*.

However in the same field of invention, Cook teaches rotating windows on the z-axis within a three-dimensional environment in Column 6, lines 1-14. Accordingly it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the method of displaying three-dimensional workspace on a display screen as shown by Gordon, Miller, and Jetha to incorporate rotating objects along the z-axis in three-dimensional environment as taught by Cook, thus allowing to display more window area (Cook, 6: 7-10).

**As for dependent claims 17 and 29:**

Claims 17 and 29 reflect the computer-readable storage medium and apparatus comprising of computer readable instructions for performing the step of method claim 5 and are respectfully rejected along the same rationale.

**It is noted that any citation to specific, pages, columns, lines, or figures in the prior art references and any interpretation of the references should not be considered to be limiting in any**



way. A reference is relevant for all it contains and may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art. In re *Heck*, 699 F.2d 1331, 1332-33, 216 USPQ 1038, 1039 (Fed. Cir. 1983) (quoting In re *Lemelson*, 397 F.2d 1006, 1009, 158 USPQ 275, 277 (CCPA 1968)).

The Examiner notes MPEP § 2144.01, that quotes *In re Preda*, 401 F.2d 825, 159 USPQ 342, 344 (CCPA 1968) as stating “in considering the disclosure of a reference, it is proper to take into account not only specific teachings of the reference but also the inferences which one skilled in the art would reasonably be expected to draw therefrom.” Further MPEP 2123, states that “a reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill the art, including nonpreferred embodiments. *Merck & Co. v. Biocraft Laboratories*, 874 F.2d 804, 10 USPQ2d 1843 (Fed. Cir.), cert. denied, 493 U.S. 975 (1989).

### ***Response to Arguments***

8. Applicant's arguments with respect to claims 1-9, 11-21, 23-33, and 35-37 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Phantana-angkool whose telephone number is 571-272-2673. The examiner can normally be reached on M-F, 9:00-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on 571-272-4847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David Phantana-angkool/

Examiner, Art Unit 2179

/Weilun Lo/

Supervisory Patent Examiner, Art Unit 2179